

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
96/17724-767	04/07/97	ZAHIDQIAT	H ALTAJA 147A

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HM1270410

 EXAMINER

NOLAN, P

ART UNIT	PAPER NUMBER
1644	26

**DATE MAILED:**

04/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No.	08/771,767	Applicant(s)	Zaghrouani
Examiner	Nolan	Group Art Unit	1644

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

Responsive to communication(s) filed on 4/3/00

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

Claim(s) 4, 6, 9, 11-21, 24-27, 29-70, 72-73 is/are pending in the application.

Of the above claim(s) 12-21, 25, 30-65 is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 4, 6, 9, 11, 24, 26, 27, 29, 66-70 and 72-73 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The proposed drawing correction, filed on \_\_\_\_\_ is approved disapproved.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some\* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892

Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948

Other Sequence letter

## Office Action Summary

**Part III DETAILED ACTION**

1. Claims 4, 6, 9, 11-21, 24-27, 29-70 and 72-73 are pending. Claims 12-21, 25 and 30-65 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

2. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. §§ 1.821-1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 4, 6, 9, 11, 24, 26, 27, 29, 66-70 and 72-73 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bona et al. (U) in view of Kuchroo et al. (U), all of record, for reasons

stated in Paper No. 21.

Applicant's arguments filed 4/3/00 have been fully considered but are not found persuasive.

The declaration under 37 CFR 1.132 filed 4/3/00 is insufficient to overcome the rejection of claims 4, 6, 9, 11, 24, 26, 27, 29, 66-70 and 72-73 based upon Bona et al., in view of Kuchroo et al., under 35 USC 103 as set forth in the last Office action because:

The evidence supplied in the declaration is not a showing of unexpected results. Applicant's arguments are directed to the evidence shown in the declaration. In responding to the lack of unexpected results shown in the declaration the Examiner will be addressing the arguments set forth in the arguments section of Applicant's response. However, one distinction should be made, the declaration provides evidence for EAE rats observed for 120 days after EAE induction. Applicant argues that the current Ig-peptide conjugate permanently eliminated the symptoms of the disease. There is no evidence in Declaration supporting permanent elimination. The 1.132 declaration demonstrated that EAE rats given the PLP1 peptide demonstrated paralysis soon thereafter, a sign of EAE. Once EAE was demonstrated by paralysis the Ig-peptide construct, comprising a Ig molecule and the PLP peptide antagonist taught by Kuchroo et al., was given to the mice demonstrating EAE. The declaration demonstrates that mice given the Ig-peptide construct were paralysis free for 120 days after the initial EAE inducing PLP1 peptide was given. The difference between Applicant's experimental demonstration and the prior art teaching is the time EAE induced paralysis was inhibited. The Kuchroo et al., article demonstrates the same EAE induction, by immunizing with the PLP peptide and then waiting for paralysis to occur, and then giving the EAE mice the same PLP peptide antagonist. The Kuchroo et al., article demonstrates the complete inhibition of EAE induced paralysis for 10 days, or 25 days after the initial immunization with the EAE inducing peptide, see Figure 4, in particular. So the only difference between the prior art and the declaratory evidence is the showing of an increased half life of the EAE paralysis inhibiting peptide. However, as stated in the 35 USC 103 rejection, Bona et al., specifically teaches that one of the benefits of using Ig in the Ig-peptide construct is that using Immunoglobulins (IG's) replaced in the CDR3 region with peptide are useful in targeting antigens to antigen presenting cells because IG's have longer half lives than synthetic peptides, (page 23 in particular). So the making of the Ig-peptide construct made obvious by the combined teachings of Bona et al., and Kuchroo et al., would have the expected property of increased half-life, since Bona et al., teaches that one of the advantages of using Ig in the Ig-peptide construct is increased half-life of the construct over the synthetic peptides alone.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

5. The rejection of claims 4, 6, 9, 11, 24, 26, 27, 29, 66-70 and 72-73 rejected under 35 U.S.C. 112, first paragraph, has been obviated in view of Applicant's amendment filed 4/3/00.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Nolan whose telephone number is (703) 305-1987. The examiner can normally be reached on Monday through Friday from 8:30 am to 4:30 pm.

8. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Christina Chan, can be reached at (703) 305-3973. The FAX number for our group, 1644, is (703) 305-7939. Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 308-0196.

*Patrick J. Nolan*  
Patrick J. Nolan, Ph.D.  
Patent Examiner, Group 1640  
April 12, 2000

**PATRICK NOLAN**  
**PATENT EXAMINER**